

AMENDMENT

IN THE CLAIMS:

Please amend the claims as follows:

1-11. (CANCELLED)

12. (CURRENTLY AMENDED) A method for measuring a distance between a distance sensor (5), which is carried by a vehicle (1), and an object (2), the method comprising:

emitting electromagnetic impulse signals (6); and

receiving signals (7) which are reflected by the object (2), wherein the signal (7) which is reflected by the object (2) comprises a related sequence of pulses (10), each pulse (10) being separated in order to attain a sensed pulse (14), and the sensed pulses (14) are added together and a modulation signal (18) is superimposed onto the received pulses (10) prior to separation and addition wherein the modulation signal (18) comprises a related sequence of pulses (10) of constant amplitude distribution, wherein the modulation signal (18) is distributed uniformly in terms of time, and its amplitude corresponds to a ~~quantisation~~ quantization level (13) during separation of the received pulses, or to an integral multiple of such a ~~quantisation~~ quantization level.

13-14. (CANCELLED)

15. (CURRENTLY AMENDED) A method according to ~~claim 14~~ claim 12, wherein the number of the sensed pulses (14) which belong together and the number of ~~quantisation~~ quantization levels (13) which are superimposed with the modulation signal (18) are coprimes.

16. (PREVIOUSLY PRESENTED) A method according to claim 12, wherein the modulation signal (18) is an unbiased modulation signal.

17. (PREVIOUSLY PRESENTED) A method according to any one of claims 12, wherein the modulation signal (18) is a sawtooth signal.

18. (PREVIOUSLY PRESENTED) A method according to claim 12, wherein the quantisation levels (13) are displaced or scaled subject to the modulation signal (18).

19. (PREVIOUSLY PRESENTED) A method according to claim 12, wherein the received pulses (10) are scaled subject to the modulation signal (18).

20. (PREVIOUSLY PRESENTED) A method according to claim 12, wherein phases of the received pulses (10) are displaced subject to the modulation signal (18).

21. (PREVIOUSLY PRESENTED) A method according to claim 12, wherein the time location of at least one of the emitted impulse signals (6) and the signal propagation time is varied, subject to the modulation signal (18).

22. (CURRENTLY AMENDED) A device for measuring a distance between a distance sensor (5), which is carried by a vehicle (1), and an object (2), the device comprising:

a transmitter (3) being equipped to transmit electromagnetic impulse signals (6); and

a receiver (4) for receiving signals which are reflected from an object, wherein the ~~receiver~~ receiver is adapted for superimposing a modulation signal (18) onto ~~the~~ received pulse (10) in order to receive signals (7) which are reflected by an object (2) in the form of a related sequence of pulses (10), with each pulse (10) separated in order to attain a sensed pulse (4) and to add together the sensed pulses (14), wherein the modulation signal (18) includes a related sequence of pulses (10) of constant amplitude distribution and is distributed uniformly in terms of time and its amplitude corresponds to a quantization level (13) during separation of the received pulses, or to an integral multiple of such quantization level.